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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,796	12/11/2003	Ananda Chinnaiah Sankaran	016295.1470 (DC-05374)	8188
23640	7590	10/12/2007	EXAMINER	
BAKER BOTTS, LLP			ZHE, MENG YAO	
910 LOUISIANA			ART UNIT	
HOUSTON, TX 77002-4995			PAPER NUMBER	
			2195	
			NOTIFICATION DATE	
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			10/12/2007	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

debbie.allen@bakerbotts.com

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Office Action Summary	Application No.	Applicant(s)	
	10/733,796	SANKARAN ET AL.	
	Examiner	Art Unit	
	MengYao Zhe	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/11/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-23 are presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The following claim languages are unclear and indefinite:

- i) Claim 1, lines 4-5, it is unclear how "a performance ratio" is determined <i.e. is there an equation? Is it actually the performance of failing-over cluster node divided by the performance of a fail-over cluster node?>.

Claims 10 and 17 have the same deficiencies as claim 1 above.

- ii) Claim 17, lines 3-4, it is uncertain whether when the "software executed", if it is performing "the method steps of: accessing a knowledge-base...." <i.e. Is it a software or a method claim?>

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 5-14, 17-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Roselli et al., Patent No. 6,718,486 (hereafter Roselli).

6. Claims 1, 10, and 17, Roselli teaches the invention as claimed including a method for allocating application processing operations among information handling system cluster resources in response to a fail-over event (Column 9, lines 44-48), comprising:

identifying a performance ratio between a failing-over cluster node and a fail-over cluster node (Column 9, line 63-Column 10, line 5; Column 10, lines 10-22, lines 25-39; Column 19, lines 53-57);

transforming a first calendar schedule associated with failing-over application processing operations into a second calendar schedule to be associated with failing-over application processing operations on the fail-over cluster node in accordance with

the performance ratio; and implementing the second calendar schedule on the fail-over cluster node such that the fail-over cluster node may effect failing-over application processing operations according to the second calendar schedule (Column 9, lines 32-36; Column 10, lines 10-22, lines 25-39; Column 13, lines 32-37; Column 19, lines 53-57).

7. As per claims 2, 11, 12, 13, and 14, Roselli teaches determining whether resources on the fail-over cluster node are sufficient to support failing-over application processing operations in accordance with the second calendar schedule in addition to any existing fail-over cluster node application processing operations (Column 9, line 63-Column 10, line 5).

8. As per claims 3, 22, Roselli teaches applying a resource negotiation algorithm to the application processing operations of the fail-over node in response to determining that the resources of the fail-over cluster node are insufficient to support both failing-over application processing operations in accordance with the second calendar schedule and any existing fail-over cluster node application processing operations (Column 9, line 63-Column 10, line 5; Column 19, lines 50-57).

9. As per claim 5, Roselli teaches identifying at least one characteristic of the failing-over cluster node; identifying at least one characteristic of the fail-over cluster

node; and calculating the performance ratio between the failing-over cluster node and the fail-over cluster node based on the identified characteristics of each node (Column 19, lines 50-57).

10. As per claim 6, Roselli teaches collecting information handling system cluster node resources required by at least one application to be deployed in an information handling system cluster configuration (Column 10, lines 6-22).

11. As per claim 7, Roselli teaches maintaining a knowledge-base containing information regarding one or more operational aspects of the information handling system cluster (Column 9, lines 30-36; Column 10, lines 23-40).

12. As per claims 8, 18, 19, 20, 21, Roselli teaches determining whether the first calendar schedule for a selected cluster node is feasible using operational aspects of the selected cluster node available in the knowledge-base (Column 9, line 65-Column 10, line 5; Column 19, lines 50-57).

13. As per claims 9 and 23, Roselli teaches updating an application-to-cluster node map identifying the cluster node associated with each application following the

allocation of application processing operations among the information handling system resources in response to a fail-over event (Column 13, lines 32-37).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 4, 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roselli et al., Patent No. 6,718,486 (hereafter Roselli).

16. As per claims 4, 15, and 16, Roselli teaches redistributing scheduled jobs on a failed node to other nodes according to the amount of workload on the other nodes (Column 9, line 63-Column 10, line 5; Column 19, lines 50-57). Roselli does not specifically teach calculating a new calendar schedule for the fail-over node application processing operations based on results from application of the resource negotiation algorithm; and implementing the new calendar schedule on the fail-over node.

However, since Roselli does teach a fault-tolerance unit that monitors the workload on each node and rescheduled jobs on a failed node accordingly, it would have been obvious to one having ordinary skill in the art to use this fault-tolerance unit to try to fit a set of jobs from a failed node to a second node and come up with a new


schedule. In response to calculating that the workload would be too taxing on this second node, the fault-tolerance unit would take away some jobs from the set of jobs and redistribute to other nodes, while the remaining jobs would be scheduled into the second node as part of a new calendar schedule to be run.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MengYao Zhe whose telephone number is 571-272-6946. The examiner can normally be reached on Monday Through Friday, 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached at 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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